


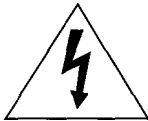
SAMSUNG

SyncMaster 700s

Color Monitor



Owner's
Instructions

	<p>CAUTION</p> <p>RISK OF ELECTRIC SHOCK</p> <p>DO NOT OPEN</p>	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and servicing instructions in the literature accompanying the appliance.

Unpacking your Monitor

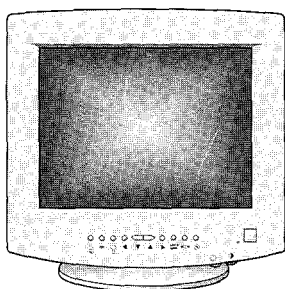
Please make sure the following items are included with your computer monitor:



This Manual



Warranty Card
(Not available in all areas)



Monitor and Stand



Power Cable



Signal Cable

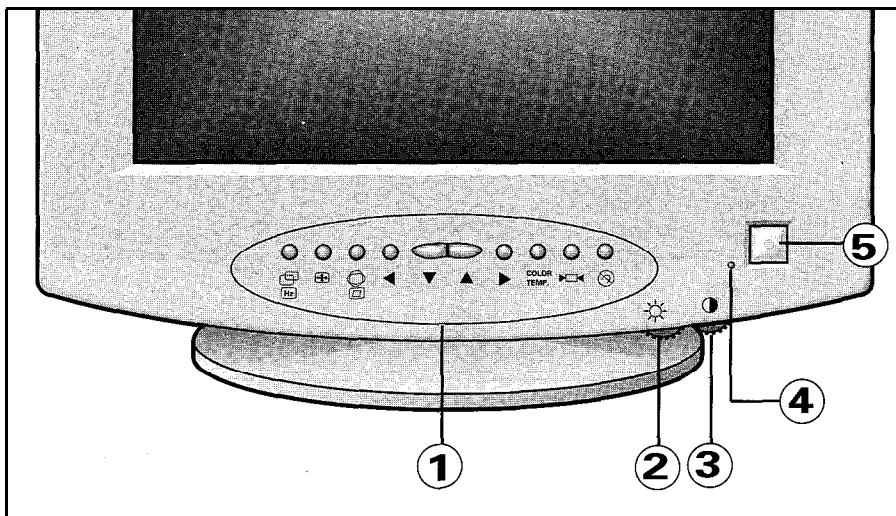
Preface: Safety Information	2
Chapter One: Overview of Your Monitor	3
Front Panel	3
Rear Panel	4
Chapter Two: Installation	5
Connecting Your Monitor to a Computer	5
Chapter Three: Adjusting Your Monitor	6
Overview	6
Direct Access Features	6
Contrast	6
Brightness	6
Control Function Features	7
Position(H/V) / User or Preset Model	7
Size(H/V)	8
Geometric Distortion (G/D)	8
Color Temperature	9
Recall	9
Degauss	9
PowerSaver	10
Troubleshooting	11
Appendix	12
Specifications	12
Pin Assignments	13
Display Modes Timing Chart	13
FCC Information	14
IC Compliance Notice	16
VCCI Information	16
MPR II Compliance	16
European Notice	16
Index	17



Preface: Safety Information

Please read and follow these instructions when connecting and using your computer monitor.

- 1** Before connecting the AC power cord to an outlet, make sure the voltage designation on your monitor corresponds to the local electrical supply.
- 2** Never insert anything metallic into the monitor openings. Doing so may create the danger of electric shock.
- 3** To avoid electric shock, never touch the inside of the monitor. Only a qualified technician should open the monitor's case.
- 4** Never use your monitor if the power cord has been damaged. Do not allow anything to rest on the power cord, and keep the cord away from where people could trip over it.
- 5** Be sure to hold the plug, not the cord, when disconnecting the monitor from an electric socket.
- 6** Openings in the monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered. Also, avoid using the monitor on a bed, sofa, rug, or other soft surface. Doing so may block the ventilation openings in the bottom of the cabinet. If you put the monitor in a bookcase or some other enclosed space, be sure to provide adequate ventilation.
- 7** Put your monitor in a location with low humidity and a minimum of dust. Avoid places like damp basements or dusty hallways.
- 8** Do not expose the monitor to rain or use it near water (in kitchens, next to swimming pools, etc.). If the monitor accidentally gets wet, unplug it and contact an authorized dealer immediately. You can clean the monitor with a damp cloth when necessary, but be sure to unplug the monitor first.
- 9** Place the monitor on a solid surface and treat it carefully. The screen is made of glass and can be damaged if dropped or sharply hit.
- 10** Locate your monitor near an easily accessible AC outlet.
- 11** If your monitor does not operate normally – in particular, if there are any unusual sounds or smells coming from it – unplug it immediately and contact an authorized dealer or service center.
- 12** High temperatures can cause problems. Don't use your monitor in direct sunlight, and keep it away from heaters, stoves, fireplaces, and other sources of heat.
- 13** Unplug the monitor when it is going to be left unused for an extended period of time.
- 14** Unplug your monitor from the AC outlet before any service.

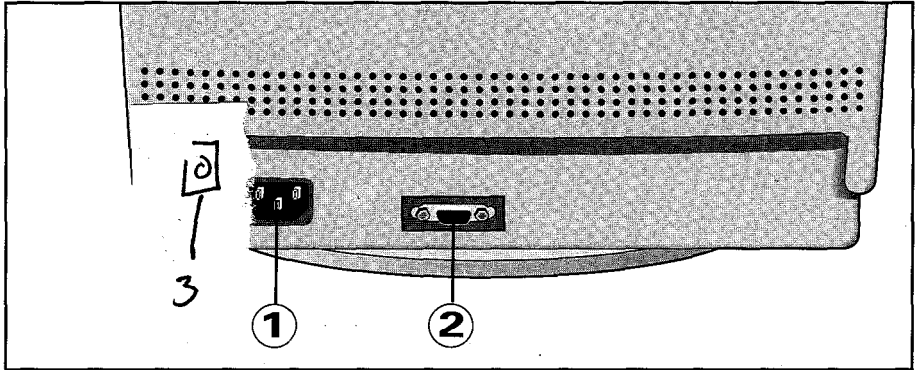


Front Panel

- 1 Function control buttons**
Use these buttons to control the shape of the display area, and to control the color qualities of the display image.
- 2 Brightness**
Use this rotary control to adjust the overall brightness of the display image.
- 3 Contrast**
Use this rotary control to adjust the contrast level of the display image.
- 4 Power indicator**
This light glows green during normal operation, and glows amber when you are making adjustments.
- 5 Power button**
Use this button to turn the monitor on and off.



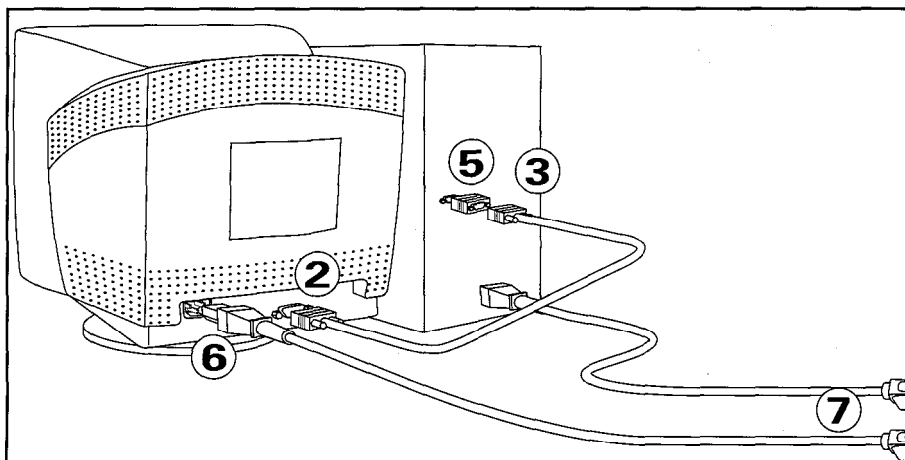
Chapter One: Overview of Your Monitor



Rear Panel

1 Power port
Connect the power cable here.

2 Signal port
Connect your signal cable here.



Connecting Your Monitor to a Computer

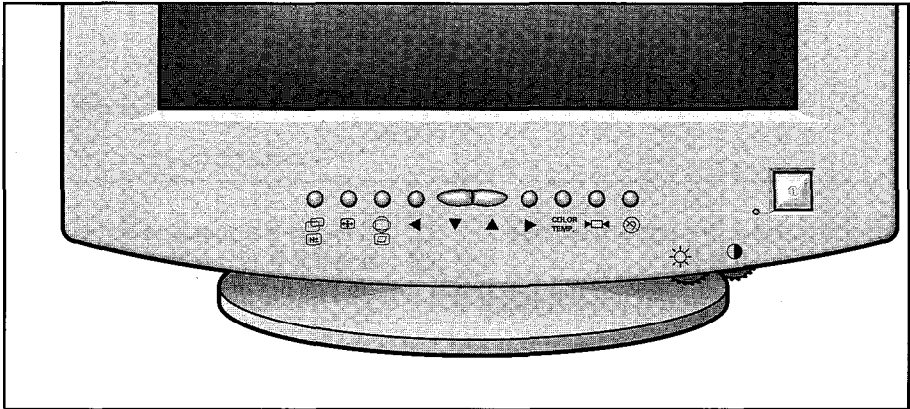
- 1** Turn off your computer and unplug its power cord.
- 2** Connect the signal cable to the signal port on the back of your monitor.
- 3** If you are using a Macintosh computer, connect the other end of the signal cable to a Macintosh adapter. (The adapter is not included with your monitor. Contact your dealer for more information.) If you are using an IBM-compatible computer, skip to step 5.
- 4** Follow the instructions included with your adapter to set the pins on your adapter, if necessary.
- 5** Connect the signal cable (with the adapter if necessary) to the video port on the back of your computer. This port might be directly attached to your computer, or it might be part of a video board, video card, or graphics card.
- 6** Connect the power cord for your monitor to the power port on the back of the monitor.
- 7** Plug the power cords of your computer and your monitor into a nearby outlet.
- 8** Turn on your computer and monitor. If your monitor displays an image, installation is complete.



Chapter Three: Adjusting Your Monitor

Overview

Your Samsung SyncMaster computer monitor allows you to easily adjust the characteristics of the image being displayed. All of these adjustments are made using the control buttons on the front of the monitor. While you use these buttons to adjust the controls, an on-screen menu shows you their numeric values as they change.



Direct-Access Features

The features described on this page can be accessed quickly, at the touch of one button.



Contrast

This feature will adjust the monitor's contrast.

- Rotate the rotary control to the right to increase the contrast between dark colors and light colors, or move it to the left to decrease the contrast.



Brightness

This feature will adjust the overall brightness of the display image.

- Rotate the rotary control to the right to increase the level of brightness, or to the left to decrease the brightness.

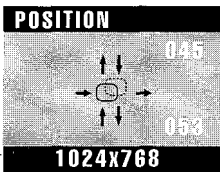
Control Function Features

The features described in this section can all be accessed using your monitor's control function buttons.

While implementing control functions, the indicator's color is orange. However, you cannot adjust the display image while a control function is disabled (the indicator's color is green).

Most features use only one button for access, however some features require that you push two buttons. Follow the instructions below to adjust the features.

The monitor will automatically save your changes when the OSD remains inactive for approximately 8 seconds.

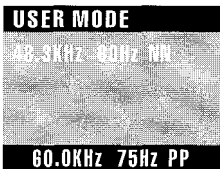


Position (H/V) / User or Preset Mode

First Function: Position (H/V)

Follow these instructions to change the position of the monitor's entire display.

- 1 Push this button once to adjust the horizontal and vertical position (centering) of the display.
- 2 Use the ◀ and ▶ buttons to change the horizontal position of the entire display; use the ▼ and ▲ buttons to change the vertical position.



Second Function: User or Preset Modes

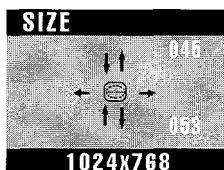
Push this button twice to access the user and preset modes information. The OSD shows the contents of the user modes and factory timing modes. Use the adjustment control buttons (▼ and ▲) to "page" through the list.



Chapter Three: Adjusting Your Monitor



Size (H/V)

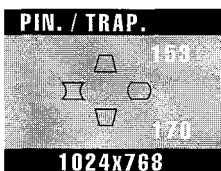


Follow these instructions to change the size of the monitor's entire display.

- 1 Push this button once to adjust the horizontal and vertical size of the entire display.
- 2 Use the ◀ and ▶ buttons to change the horizontal size (width) of the entire display; use the ▼ and ▲ buttons to change the vertical size (height).



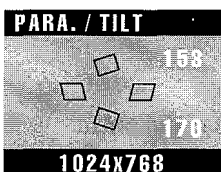
Geometric Distortion (G/D)



First function: Pincushion / Trapezoid

Adjust the pincushion setting when the sides of the display are bowed in or bowed out.; adjust the trapezoid setting to equalize the length of the top and bottom edges.

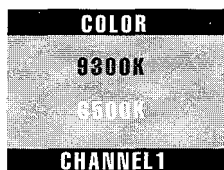
- 1 Push this button once to access the pincushion and trapezoid functions.
- 2 Use the ◀ and ▶ buttons to change the pincushion setting; use the ▼ and ▲ buttons to change the trapezoid setting.



Second function: Parallelogram/ Tilt

Adjust the parallelogram setting when the display is leaning left or right; adjust the tilt setting when the display area appears rotated to the left or right.

- 1 Push this button twice to access the parallelogram and tilt functions.
- 2 Use the ◀ and ▶ buttons to change the parallelogram setting; use the ▼ and ▲ buttons to adjust the tilt setting.

COLOR
TEMP.

Color Temperature

Follow these steps to change the color temperature setting. Color Temperature is a measure of the "warmth" of the image colors.

- 1 Push this button once to access the color temperature function.
- 2 Use the ▼ and ▲ buttons to select between the 9300K color and the 6500K color.



Recall

Use this button to return the settings to their original factory settings.

- Push and hold in the recall button for several seconds, or until the power indicator LED changes from orange to green.

After pushing this button, a green LED indicates that the factory settings for the current video signal timing have been recalled. The OSD shows the progress of the recall function.

Note : This operation resets all of the data in the user memory area for the current timing signal.



Degauss

The Degauss feature will remove any color impurity caused by magnetic fields. Do not use the Degauss feature more than once within a 30-minute period.

- Push the button once to activate the degaussing circuit. The monitor may buzz momentarily, the image colors may change and the image will jiggle for a few seconds. These effects are normal.

The degaussing circuit automatically turns itself off after a few seconds.

WARNING : Don't push and hold the degauss button for longer than 5 seconds. If you do, this operation resets all of the data in the user memory area. If this occurs, you must remake your user adjustments.



Chapter Three: Adjusting Your Monitor

PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The available modes are "On," "Standby," "Suspend," and "Off."

This system operates with a VESA DPMS compliant video card installed in your computer. You use a software utility installed on your computer to set up this feature. See the table below for details.

State	Normal Operation	Power Saving function mode EPA/NUTEK		
		Standby mode	Suspend mode Position A1	Power-off Mode Position A2
Horizontal Sync Vertical Sync Video	Active Active Active	Inactive Active Blanked	Active Inactive Blanked	Inactive Inactive Blanked
Power Indicator	Green	Amber	Amber/Green Blinking	Amber Blinking
Power Consumption	100W (max.) 90W (nominal)	55W (nominal)	Less than 15W	Less than 8W

NOTE: This monitor automatically returns to normal operation when horizontal and vertical sync return. This occurs when you move the computer's mouse or press a key on the keyboard.

This monitor is EPA Energy Star compliant and NUTEK compliant when used with a computer equipped with VESA DPMS functionality. If your computer system cannot support a display power management function, you can purchase an optional DPMS software program to enable the power saving function. Please contact Samsung or your dealer for more information.

For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.

Troubleshooting

Before calling for service, check the information in this section to see if you can remedy any problems yourself.

If you do need assistance, please call the phone number on the warranty card, the phone number on the back cover of this manual, or contact your dealer.

There is no screen image.

- Check to see that both the monitor and the computer are plugged in and turned on.

“Check Signal Cable” appears

- Check the signal cable connection between the computer and the monitor.

The image is too light or too dark.

- Adjust the Brightness or Contrast settings.

The image is too large or too small.

- Adjust the Size settings.

The colors are distorted with dark or shadowed areas.

- Activate the Degauss feature.
- Adjust the Color Temperature settings.

The power indicator is amber, amber/green, or blinking.

- The monitor is using its power management system. Check the power management utility on your computer.



Specifications

Picture Tube	<ul style="list-style-type: none">• 43 cm (17") full square type [40 cm (15.7") viewable]• Flat face 90° deflection• 0.28 Dot pitch• Silica coated with anti electrostatic• Medium short persistence phosphor
Synchronization	<ul style="list-style-type: none">• Horizontal: 30 kHz to 69 kHz (automatic)• Vertical: 50 Hz to 160 Hz (automatic)
Display Color	<ul style="list-style-type: none">• Unlimited colors
Maximum Resolution	<ul style="list-style-type: none">• Horizontal: 1280 dots• Vertical: 1024 lines
Active Display	<ul style="list-style-type: none">• Horizontal: 306 ± 3 mm (12.05" ± 0.12")• Vertical: 230 ± 3 mm (9.06" ± 0.12") <p>(Active display size is dependent upon signal timing)</p>
Input Signal, Terminated	<ul style="list-style-type: none">• Analog 0.714 Vpp positive at 75 Ω• Separate sync: TTL level, positive or negative• Composite sync: TTL level, positive or negative
Maximum Pixel Clock	<ul style="list-style-type: none">• 110MHz
Power Supply	<ul style="list-style-type: none">• AC 100-240 Volt ± 10%, 60 Hz/50 Hz ± 3 Hz
Power Consumption	<ul style="list-style-type: none">• 100 Watt maximum
Dimensions/Weight	<ul style="list-style-type: none">• Unit: 424 x 446 x 425 mm; 19 Kg 16.7 x 17.6 x 16.7 in (W x D x H); 41.9 lbs.• Carton: 545 x 554 x 538 mm; 22 kg 21.5 x 21.9 x 21.2 in (W x D x H); 48.5 lbs. <p>(All measurements approximate.)</p>
Environmental Considerations	<ul style="list-style-type: none">• Operating Temperature: 32°F to 104°F (0°C to 40°C) Humidity: 10% to 80%• Storage Temperature: -4°F to 113°F (-20°C to 45°C) Humidity: 5% to 95%

NOTE: Design and specifications are subject to change without prior notice.

Pin Assignments

Sync Type	15 Pin Side of the Signal Cable (Figure 1)		Cable Adapter (Figure 2)
Pin No.	Separate	Composite	Apple MAC II
1	Red	Red	GND-R
2	Green	Green	Red
3	Blue	Blue	H/V Sync
4	GND	GND	Sense 0
5	DDC Return	DDC Return	Green
6	GND-R	GND-R	GND-G
7	GND-G	GND-G	Sense 1
8	GND-B	GND-B	Reserved
9	Reserved	Reserved	Blue
10	GND-Sync/Self-Raster	GND-Sync/Self-Raster	Sense 2
11	GND	GND	GND
12	DDC Data	DDC Data	V-Sync
13	H-Sync	H/V-Sync	GND-B
14	V-Sync	Not Used	GND
15	DDC Clock	DDC Clock	H-Sync

Figure 1 : Male Type

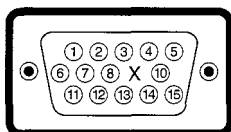
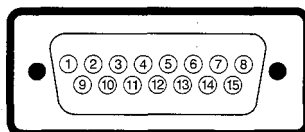


Figure 2 : Male Type



Display Modes Timing Chart

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, VGA2, 720 x 400	31.469	70.087	28.322	- / +
IBM, VGA3, 640 x 480	31.469	59.940	25.175	- / -
VESA, 640 x 480	37.500	75.000	31.500	- / -
VESA, 800 x 600	46.875	75.000	49.500	+ / +
VESA, 800 x 600	53.674	85.061	56.250	+ / +
VESA, 1024 x 768	60.023	75.029	78.750	+ / +
VESA, 1024 x 768	68.677	84.997	94.500	+ / +



FCC Information

User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called *How to Identify and Resolve Radio/TV Interference Problems* helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.



Appendix

IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

VCCI Information

This equipment is in the 2nd Class category (information equipment to be used in a residential area or an adjacent area thereto) and conforms to the standards set by the Voluntary Control Council For Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in such residential area. When used near a radio or TV receiver, it may become the cause of radio interference. Read the instructions for correct handling.

MPR II Compliance

The SyncMaster 700s monitor complies with SWEDAC (MPR II) recommendations for reduced electric and magnetic fields.

European Notice

Manufacturer: Samsung Electronics Co., Ltd.

Model Number: SyncMaster 700s

Products with the CE Marking comply with both the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN55022 (CISPR 22) – Radio Frequency Interference
- EN50082-1 : 1992 – Electromagnetic Immunity
- EN60555-2 (IEC555-2) – Power Line Harmonics
- EN60555-3 (IEC555-3) -Voltage Fluctuations
- EN60950 (IEC950) – Product Safety

A		S	
Adapter	5	Safety	2
B		Signal cable	ii
Brightness	3, 6	Signal port	4
C		Size	8
Color temperature	9	Specifications	12
Connecting your monitor to a computer	5	Stand	ii
Contrast	3, 6	T	
D		Tilt	8
Degauss	9	Trapezoid	8
Display modes timing chart	13	Troubleshooting	11
E		U	
European notice	16	User mode	7
F		V	
FCC information	14	VCCI information	16
Front panel	3	W	
Function control buttons	3	Warranty card	ii
G			
Geometric distortion	8		
I			
IC compliance notice	16		
Installation	5		
M			
Macintosh	5		
Manual	ii		
MPR II compliance	16		
P			
Parallelogram	8		
Pin assignments	13		
Pincushion	8		
Position	7		
Power button	3		
Power cable	ii		
Power indicator	3		
Power port	4		
Powersaver	10		
Preset mode	7		
R			
Rear panel	4		
Recall	9		

U.S.A. :

Samsung Electronics America (SEA)
One Samsung Place
Ledgewood, NJ 07852
Tel. : 1-800-SAMSUNG (1-800-726-7864)
Fax-on-Demand for product information :
1-800-229-2239

CANADA :

Samsung Electronics Canada Inc.
7037 Financial Drive
Mississauga, Ontario L5N 6R3
Tel. : 1-800-SAMSUNG (1-800-726-7864)
Fax. : (416) 542-1199

GERMANY:

Samsung Electronics GmbH
Infoline
Tel. : 0180-5121213
Fax. : 0180-5121214

AUSTRALIA :

Samsung Electronics Australia Pty Ltd.
Unit G, 10-16 South Street,
Rydalmere, N.S.W. 2116
P.O. BOX 368
Tel. : (02) 638 5200

ITALIA :

Samsung Electronics Italia SpA
Via C. Donat Cattin,
5-20063 Cernusco sul Naviglio (Mi)
Tel. : 167-010740

PANAMA :

Servicios Samsung (Zona Libre), S.A.
50 and 61 Streets Sta, Cecilia
Bdl. Don Camilo, Panama City
Tel. : (507) 264-0195 or 269-5571
Fax : (507) 269-5568

ESPAÑA :

Samsung Electrónica Comercial Ibérica, S.A.
Ciencias, 55-65 (Polígono Pedrosa) 08908
Hospitalet de Llobregat (Barcelona)
Tel. : (93) 261 67 00
Fax. : (93) 261 67 50

UK:

Samsung Electronics (UK) Ltd.
Samsung House, 225 Hook Rise South
Surbiton, Surrey KT6 7LD
Tel. : (0181) 391 0168
Fax. : (0181) 397 9949

<European Service Center & National Service>

Stafford Park 12 Telford, Shropshire, TF3 3BJ
Tel. : (01952) 292 262
Fax. : (01952) 292 033

THAILAND :

Samsung Service Center
729-729/1 JSP Tower Rachadapisek RD.,
Bangpongpan, Yannawa, Bangkok 10120
Tel : (662) 2954508-14
Fax : (662) 2954267

SOUTH AFRICA :

Samsung Electronics South Africa
Somerset Office Park 5 Libertas Road
Bryanston, South Africa
Tel : (27)-11-463-5678
Fax : (27)-11-463-5215

BRASIL :

Samsung Eletrônica da Amazonia Ltda.
R. Prof. Manoelito de Ornellas, 303-2° Andar
Chácara Sto. Antônio • cep : 04719-040
São Paulo • SP
Tel. : (011) 541-8500
Fax : (011) 523-3995, 522-0726



"As an ENERGY STAR Partner, SAMSUNG has determined that this product meets the ENERGY STAR guidelines for energy efficiency."